

Abstract

A method is provided for coating at least a portion of at least one device that includes arranging on a surface of a substrate a solution, directing a beam at the substrate, and arranging the at least one device in an ejection cone formed by a vaporization of the solution.

- 5 The beam heats the substrate. The solution may be vaporized by a heat transfer from the substrate to the solution. The ejection cone may include a vaporized solution or an atomized solution. The atomized solution may be formed by an explosive vaporization of the solution. The solvent may have a boiling point less than a thermal damage temperature of the bioactive agent. The method may further include arranging on the solution another solution and
- 10 ejecting by the vaporization of the solution at least a portion of the other solution into the ejection cone. A system for coating at least one device is provided that includes a target assembly adapted to hold a substrate, a beam source directed at the surface of the substrate and adapted to emit a beam, and an arrangement adapted to hold the at least one device in an ejection cone. A solution may be arranged on a surface of the substrate. A medical appliance
- 15 is provided that has a coating applied by the method.